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MEMORANDUM

DATE: August 4, 2015

TO: Eric Nuchims, Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-4 Chemist, E & E, Seattle, Washington *MW*

SUBJ: **Organic Data Quality Assurance Review, John Day Vapor Response Site, John Day, Oregon**

REF: TDD: 15-05-0005

PAN: 1004530.0004.111.02

The data quality assurance review of two product samples collected from the John Day Vapor Response site in John Day, Oregon, has been completed. Gasoline range organics analysis (Ecology Method NWTPH-Gx) was performed by TestAmerica, Inc., Tacoma, Washington. All sample analyses were evaluated following EPA's Stage 2B and/or 4 Data Validation Electronic and/or Manual Process (S2B/4VE/M).

The samples were numbered: 15053903 15053904

Data Qualifications:

1. Sample Holding Times: Acceptable.

The samples were generally maintained at $< 6^{\circ}\text{C}$. The samples were collected on June 3, 2015, and were analyzed on July 30, 2015. Holding times and temperature limits do not apply to product samples.

2. Initial Calibration: Acceptable.

Calculations were verified as correct. All correlation coefficients were within QC limits.

3. Continuing Calibration: Acceptable.

Calculations were verified as correct. All percent differences were less than or equal to the laboratory control limits.

4. Error Determination: Not Performed.

Samples necessary for bias and precision determination were not provided to the laboratory. All samples were flagged RND (Recovery Not Determined) and PND (Precision Not Determined), although the flags are not found on the Form I's.

5. Blanks: Acceptable.

A method blank was analyzed at the required frequency of every 12 hours for each matrix, preparation technique, and analysis system. Gasoline-range TPHs were not detected in any blank.

6. System Monitoring Compounds (SMC): Acceptable.

All recoveries of the SMCs were greater than 10% and within QC criteria.

7. Performance Evaluation Samples: Not Provided.

Performance evaluation samples were not provided to the laboratory.

8. Blank Spikes: Acceptable.

Blank spike results were within laboratory QC limits.

9. Duplicates: Acceptable.

Laboratory spike duplicate results were within laboratory QC limits.

10. Quantitation and Quantitation Limits: Acceptable.

Sample quantitation and sample quantitation limits were correctly calculated.

11. Laboratory Contact: Not Required.

No laboratory contact was required.

12. Overall Assessment of Data for Use

The overall usefulness of the data is based on the criteria outlined in the site-specific sampling plan Site-Specific Sampling Plan and/or Sampling and Quality Assurance Plan, the OSWER Directive "Quality Assurance/Quality Control Guidance for Removal Activities, Data Validation Procedures" (EPA/540/G-90/004) and the analytical method. Based upon the information provided, the data are acceptable for use with the above stated data qualifications.

Data Qualifiers and Definitions

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

JH - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with a high bias.

JL - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with a low bias.

- JK - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with an unknown direction of bias.
- JQ - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with an unknown direction of bias and falls between the MDL and the Minimum (or Practical) Quantitation Limit (MQL, PQL).
- N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
- NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Seattle Job No.: 580-51857-1
 SDG No.: _____
 Client Sample ID: 15053903 Lab Sample ID: 580-51857-2
 Matrix: Waste Lab File ID: G3015009.D
 Analysis Method: NWTPH-Gx Date Collected: 06/03/2015 09:17
 Sample wt/vol: 1.03(g) Date Analyzed: 07/30/2015 21:39
 Soil Aliquot Vol: 10.75 (uL) Dilution Factor: 1
 Soil Extract Vol.: 10 (mL) GC Column: RTX-VRX ID: 0.45 (mm)
 % Moisture: _____ Level: (low/med) Medium
 Analysis Batch No.: 196544 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00228	Gasoline	79000	1	3900	490

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		50-150

MW 845

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Seattle Job No.: 580-51857-1
SDG No.: _____
Client Sample ID: 15053904 Lab Sample ID: 580-51857-1
Matrix: Waste Lab File ID: G3015010.D
Analysis Method: NWTPH-Gx Date Collected: 06/03/2015 09:19
Sample wt/vol: 1.10(g) Date Analyzed: 07/30/2015 22:10
Soil Aliquot Vol: 10.75 (uL) Dilution Factor: 1
Soil Extract Vol.: 10(mL) GC Column: RTX-VRX ID: 0.45(mm)
% Moisture: _____ Level: (low/med) Medium
Analysis Batch No.: 196544 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00228	Gasoline	120000	<i>me</i>	3600	450

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		50-150